

ENGINEERING MATERIAL SPECIFICATION

Material Name	Specification Number
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PHOSPHATE SOLUTION, ZINC, MAKE-UP MANGANESE	WSS-M3B72-A1
PHOSPHATE SOLUTION, ZINC, MAKE-UP NICKEL	WSS-M3B72-A2
PHOSPHATE SOLUTION, ZINC, MAKE-UP ZINC	WSS-M3B72-A3
PHOSPHATE SOLUTION, ZINC, MAKE-UP FLUORIDE	WSS-M3B72-A4
PHOSPHATE SOLUTION, ZINC, MAKE-UP IRON	WSS-M3B72-A5
PHOSPHATE SOLUTION, ZINC, MAKE-UP COPPER	WSS-M3B72-A6

1. SCOPE

The materials defined by these specifications are aqueous solutions containing key metal constituents for the phosphate bath.

2. APPLICATION

These specifications were released originally for materials used as make-up materials in the dip phosphate bath when the metal level in the bath needs to be raised.

3. REQUIREMENTS

3.1 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.2 COMPOSITION

Supplier must maintain the following characteristics to a maximum tolerance of +/- 5 % of the initial sample or as reported with the initial sample. All other essential components must be reported with the initial sample and maintained as part of the Control Plan.

3.2.1 Chemical Composition

WSS-M3B72-A1	Manganese	Initial Sample +/- 5 %
WSS-M3B72-A2	Nickel	Initial Sample +/- 5 %
WSS-M3B72-A3	Zinc	Initial Sample +/- 5 %

Date	Action	Revisions
2002 08 28	Revised	Updated and renumbered
2000 07 14		Added A6 N. Chamberlain/A. Reilly
1997 11 21	Activated	N. Chamberlain

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WSS-M3B72-A4	Fluoride	Initial Sample +/- 5 %
WSS-M3B72-A5	Iron	Initial Sample +/- 5 %
WSS-M3B72-A6	Copper	Initial Sample +/- 5 %

3.3 RESISTANCE PROPERTIES

The material defined by this specification must be used with a phosphate system and in conjunction with the phosphate system must meet the requirements of WSS-M3P1-D.

3.4 MATERIAL COMPATIBILITY

The material must be compatible with all related materials, i.e., electrocoats, sealers, and adhesives. The supplier of this material shall keep abreast of changes in technology of related materials which may affect the compatibility and performance of this product. The supplier shall notify the appropriate Ford Product Materials Engineering Office in writing when incompatibility is anticipated.